

PRODUCT DATA

All-weather Case — Type 3535-A

All-weather Case Type 3535-A houses a noise measurement system based on Hand-held Analyzer Types 2250/2250-L/2270.

The case is light and robust, with its contents protected by high-density machined foam inlays. Designed for unattended noise monitoring, the enclosure protects the measurement system from the weather and unauthorised access, while providing power and remote data retrieval.

Battery power for extended measurement durations is provided by two Li-Ion batteries. These lightweight batteries make Type 3535-A compact and completely portable. A charger is included in the case for each battery. The chargers can also be used to power the system if mains power is available. Alternatively, external DC power can be used.

A wide variety of optional accessories and measurement modules are available to tailor the system capability to the monitoring task.



Uses and Features

Uses

- Measurements made:
 - Outdoors
 - Unattended
 - In workplaces and on construction sites
 - In remote locations
- Measurements for:
 - Area planning
 - Noise control
 - Complaint investigation
 - Venue licensing

Features

- Weather protection to IP 43
- Easy to carry and transport
- Tamper protection

- Hot swap of batteries
- Flexible power options
- Type approved to Class 1

With Type 2250/2250-L/2270 logging software:

- Level trigger
- Sound recording of events
- Auto CIC calibration check
- Remote 3G broadband operation
- Automatic status SMS text messages
- Automatic status e-mail messages
- External trigger^a
- Supply voltage check^a
- Timer controlled measurement
- Periodic reports^b
- Up to 32 GB data storage

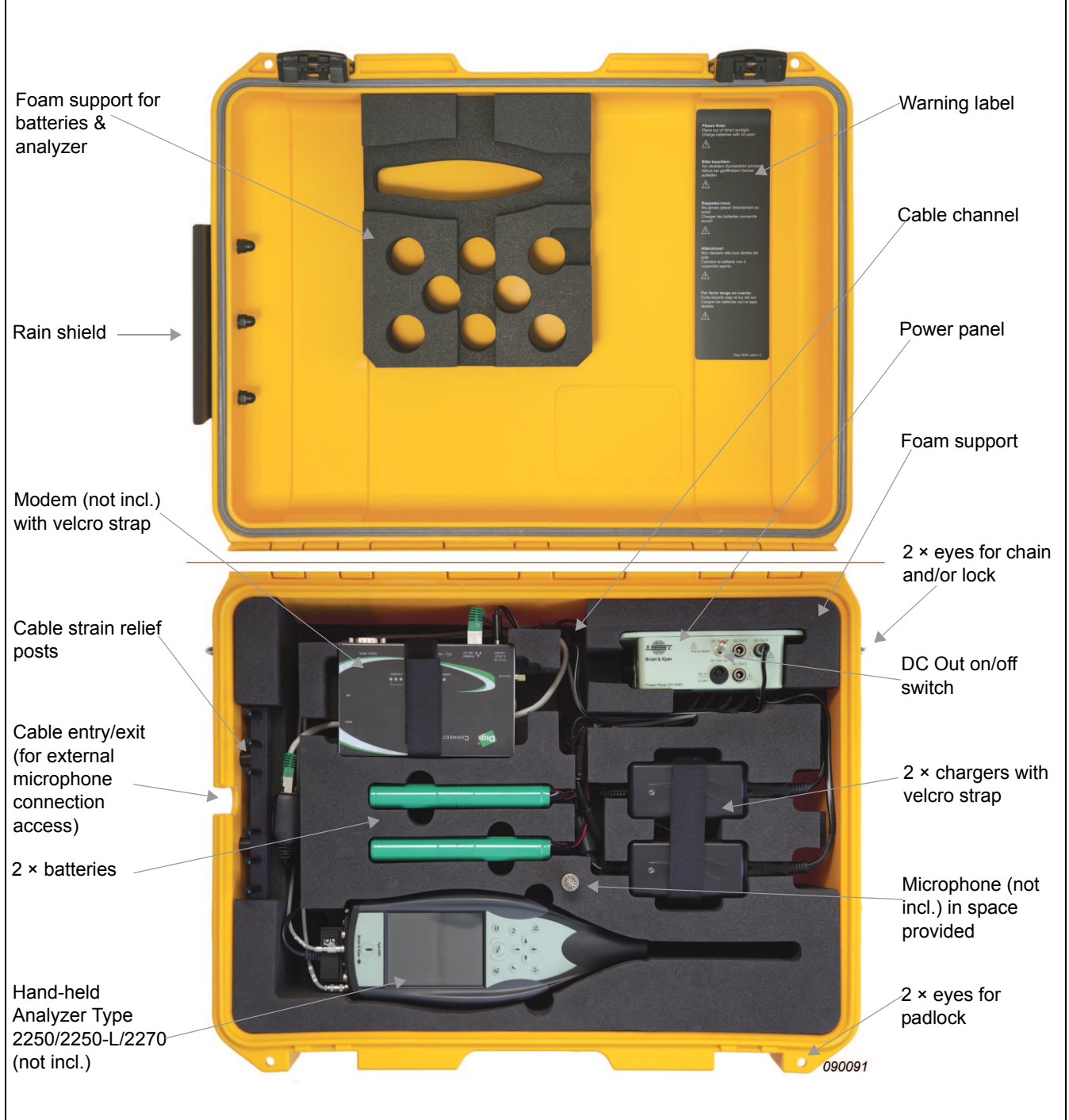


a. Type 2250/2270 software only

b. Type 2250/2270 Enhanced Logging software only

Inside the Case

Fig. 1 The contents of Type 3535-A



Protection of the Contents

During transportation the analyzer and batteries are held safely in place by the lid inlay, and the chargers and router/modem are secured using velcro straps.

During measurements any cables exiting the case, such as the microphone extension cable and a mains power cable (if used), are strain relieved inside the case and protected by a rain shield mounted on the case lid.

Power

Type 3535-A comes with two powerful batteries and two chargers. Power for the system may be provided by any or all of the following:

- One of the included batteries (QB-0073)
- Both of the included batteries (QB-0073)
- One of the included chargers (ZG-0857), provided mains power is available
- Both of the included chargers (ZG-0857), provided mains power is available
- External DC power 12–24 V

In addition, the hand-held analyzer has an internal Li-Ion battery, that provides a further 8 hours of power for the analyzer.

Fig. 2
Compact and lightweight, Type 3535-A is easy to carry and transport



The case's batteries use lithium-ion (Li-Ion) technology, well known from mobile phones, portable PCs and hand tools. Li-Ion batteries are renowned for their excellent charge retention, lack of “memory”, and very high energy efficiency (5 times better power to weight ratio than traditional lead-acid batteries). For reliable long-life operation, the batteries have internal circuitry to protect against shorts and overdischarge.

The chargers are used to charge the batteries prior to measurements, but may also be used to power the system during measurement if mains power is available.

All power sources are connected to the case's power panel, which always directs power from the source with the highest voltage to supply the measurement system and optional modems.

This way you may connect or disconnect power sources at any time during measurement, as long as just one power source remains in operation, including during hot-swapping of batteries.

The power panel output voltage can be measured and logged by Types 2250 and 2270. If you are connected to the measuring system via an internet, LAN, or GSM network, you can check the voltage remotely or automatically receive an SMS text or e-mail warning message if it drops below a preset limit.

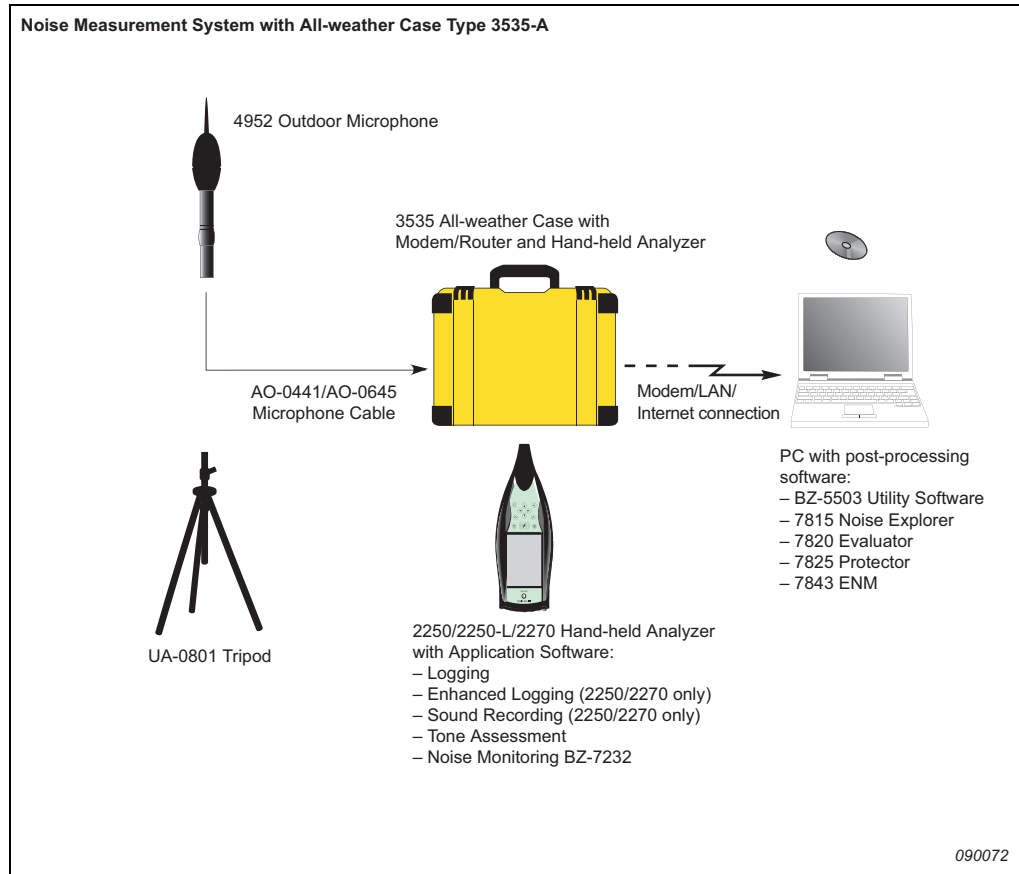
Timers

The 2250/2250L/2270 timer function provides intelligent power consumption management. This powerful facility controls precisely when the system is actively measuring and when it is in the more energy efficient stand-by mode, awaiting the next programmed measurement period.

Type 3535-A System Solution

All-weather Case Type 3535-A is the centre of a flexible system for noise measurement, recording and analysis. Any Type 2250/2250-L/2270 application software module may be used with the hand-held analyzer, although for most scenarios the Logging, Enhanced Logging and Frequency Analysis software are well suited. For details, see the Brüel & Kjær Webpage [Type 2250/2250-L/2270](#).

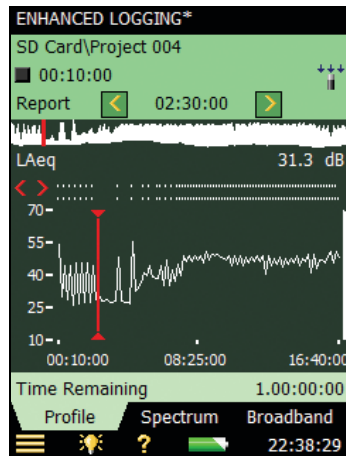
Fig. 3
All-weather Case
Type 3535-A
system diagram



Application Software

Logging software will log data down to 1-second resolution and log L_{AF} and L_{Aeq} at 0.1-second resolution. Broadband data, statistics and frequency spectra may be logged, and markers may be set manually or by level triggers. Graphical displays include an overview profile of the entire measurement, and a detailed profile for a selected period.

Fig. 4
Enhanced Logging
with Type 2250/2270



Enhanced Logging adds L_{dn} , L_{den} , $L_{evening}$ and L_{night} calculations as well as two concurrent L_{eq} periods. With long-duration measurements, it provides periodic reports, continuous measurement, automatic reboot and resumption of operations in case of power failure.

Brüel & Kjaer's patented Charge Injection Calibration (CIC) is available in the Logging and Enhanced Logging applications. For 10 seconds CIC injects an electrical signal into the microphone diaphragm, checks the entire measurement chain and delivers a pass result to show that all is in order. CIC may be activated manually or automatically at preset time intervals.

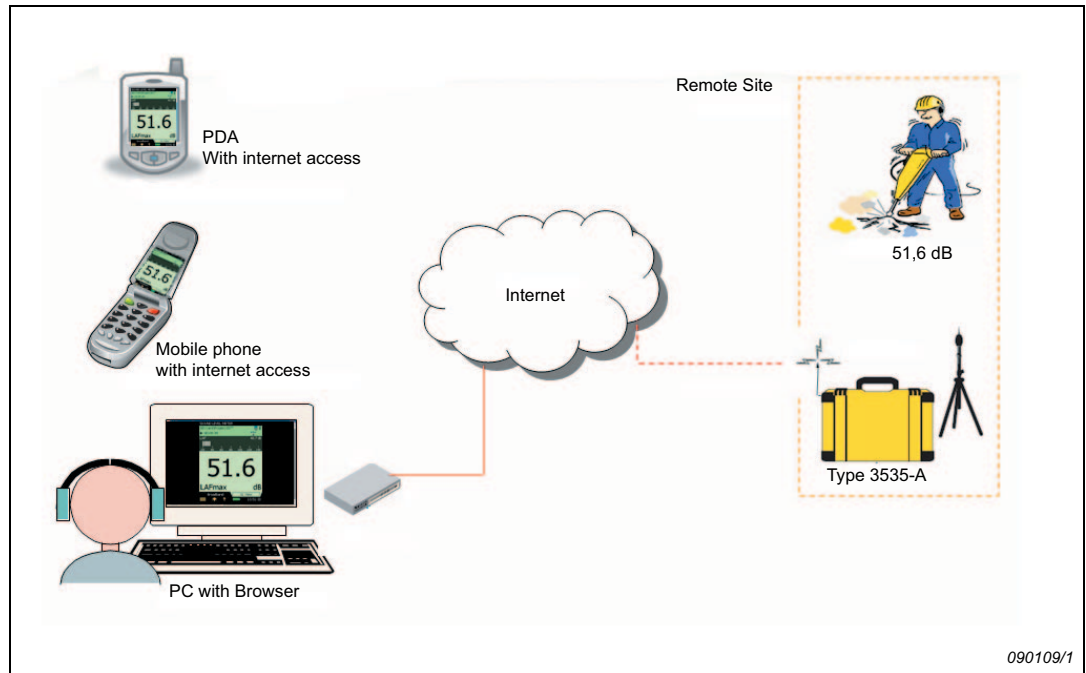
With *Sound Recording* software, you can initiate a sound recording manually, automatically using level triggers (both broadband and frequency based level triggers) or at set time intervals. Pre-recording lets you record sound occurring before sound recording is triggered, and memory space is saved by setting a suitable recording quality and maximum duration.

Remote Communication via Modem or Router

The interior foam profile and power supply compartments of the All-weather case are designed to accommodate a broadband modem or router. High-speed wireless connectivity, using 3G, GPRS, WLAN or GSM protocols, can then be used to monitor prevailing noise levels in real time, manage the measurement setup and retrieve measurement data. (See [Type 2250 Remote Control Video Demonstration](#)).

Shared public access to the live display of the analyzer inside the All-weather Case can be configured simply by activating the Web browser facility of the 2250/2250-L and 2270

Fig. 5
Type 3535 systems
viewed remotely with a
Web browser device



Using any mobile phone, PDA, or PC with Internet access, you can monitor the live screen of the analyzer by linking up through the analyzer's unique IP address on Dyn-DNS label, keeping you in touch with your measurements at all times.

Data acquired by means of unattended noise monitoring can be rendered unreliable by a number of outside factors^a, which may not become apparent until visual inspection of the system or accessing the measurement system remotely.

The 3535-A system keeps the remote operator informed of measurement status by sending an automatic SMS text or e-mail status update when pre-defined conditions or events occur. Examples are:

- System battery level falls below 10% capacity
- System memory falls below 10% of full capacity
- Automatic calibration check has failed
- Measurement has started
- Noise level has exceeded a pre-defined trigger level

Sending the text string 'info' to a Type 3535-A system will initiate an instant status message reply to the originators mobile phone or e-mail address.

a. e.g. damage to the microphone or interruption of the power supply.

Fig. 6
Outdoor Microphone
Type 4952

Outdoor Microphone Type 4952



The compact and lightweight Outdoor Microphone Type 4952 is suitable for long periods of unattended outdoor operation and the ideal choice for use with the Type 3535-A system.

The microphone is protected against the effects of wind, rain and perching birds and, with the hand-held analyzer, fulfils IEC 61672 Class 1 requirements. The reference direction angle of incidence can be set to 0° or 90°, dependent on the noise monitoring application. Inside the microphone is a highly stable pre-polarized free-field 1/2" microphone cartridge with a stainless steel diaphragm.

You can mount the microphone on a tripod using Tripod Adaptor UA-1707 or on a 1" thread pole. Outdoor Microphone Type 4952-A comes with the Tripod Adaptor included.

Type 4952 is recommended for extended use in all kinds of weather, while for less demanding environments, the analyzer's standard microphone is adequate. A lightweight and a heavy duty tripod is available for all the microphones, and up to 100 m of microphone extension cable can be used while maintaining measurement accuracy.

Reliable Unattended Measurements

Measurement integrity is of primary importance in noise measurement situations, whether for inside or outside or for attended or unattended measurements. Class 1, as described in the current sound level meter standard IEC 61672-1:2002, is the grade of accuracy often required for hand held measurements.

Fig. 7
Type approval:
independently
approved to Class 1
accuracy by PTB in
Germany

Physikalisch-Technische Bundesanstalt
Braunschweig und Berlin

Innerstaatliche Bauartzulassung vom 02.11.2005

Type approval certificate under German law, dated 02.11.2005

2. Neufassung der Anlage
Revision 2 of the Annex

Seite 1 von 11 Seiten
Page 1 of 11 pages

Zulassungsinhaber:
Issued to: Brüel & Kjær GmbH
Linzer Str. 3
28359 Bremen

Bauart:
In respect of: Integrierender Schallpegelmessler Brüel & Kjær 2250

Zertifikatsgeschichte

Zertifikats-Ausgabe	Datum	Änderungen
21.21 / 05.02, 2. Neufassung	25.02.2009	Prüfung mit Außenmikrofon 4952
21.21 / 05.02, 1. Neufassung	07.05.2007	Prüfung nach DIN EN 61672
21.21 / 05.02	02.11.2005	Erstbescheinigung

Die 2. Neufassung ersetzt die 1. Neufassung der Anlage vom 07.05.2007, Geschäftszeichen PTB-1.72-4027414 zum oben genannten Zulassungsschein sowie die für diese Fassung erteilten Nachträge:

- Nr.1 vom 26.06.2007 Geschäftszeichen PTB-1.72-4030327
- Nr.2 vom 01.10.2007 Geschäftszeichen PTB-1.72-4032119
- Nr.3 vom 29.09.2008 Geschäftszeichen PTB-1.72-4036491

Für die Messgeräte der zugelassenen Bauart gelten:

Rechtsvorschriften:

- Allgemeine Vorschriften der Eichordnung (EO-AV) vom 12. August 1988 (BGBl. I S. 1657), zuletzt geändert am 02.02.2007 (BGBl. I S. 58)
- Anlage 21 zur Eichordnung vom 12. August 1988, zuletzt geändert durch die 3. Verordnung zur Änderung der Eichordnung vom 18. August 2000 (BGBl. I S. 1307)

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Information on legal remedies available
Objections may be made to this notification within one month of its receipt either in writing or orally recorded, to the Physikalisch-Technische Bundesanstalt at one of the following addresses:

Physikalisch-Technische Bundesanstalt
Bundesallee 100
38116 Braunschweig
DEUTSCHLAND

Abbestraße 2-12
10587 Berlin
DEUTSCHLAND

090112

In addition nothing less than Class 1 accuracy is required for outdoor measurement systems incorporating rain shields, wind shields or any other form of environmental protection used in microphone systems. Placing a small device, such as a rain guard, in close proximity to the microphone diaphragm may produce significant acoustic disturbance and thus measurement errors at mid and high frequencies.

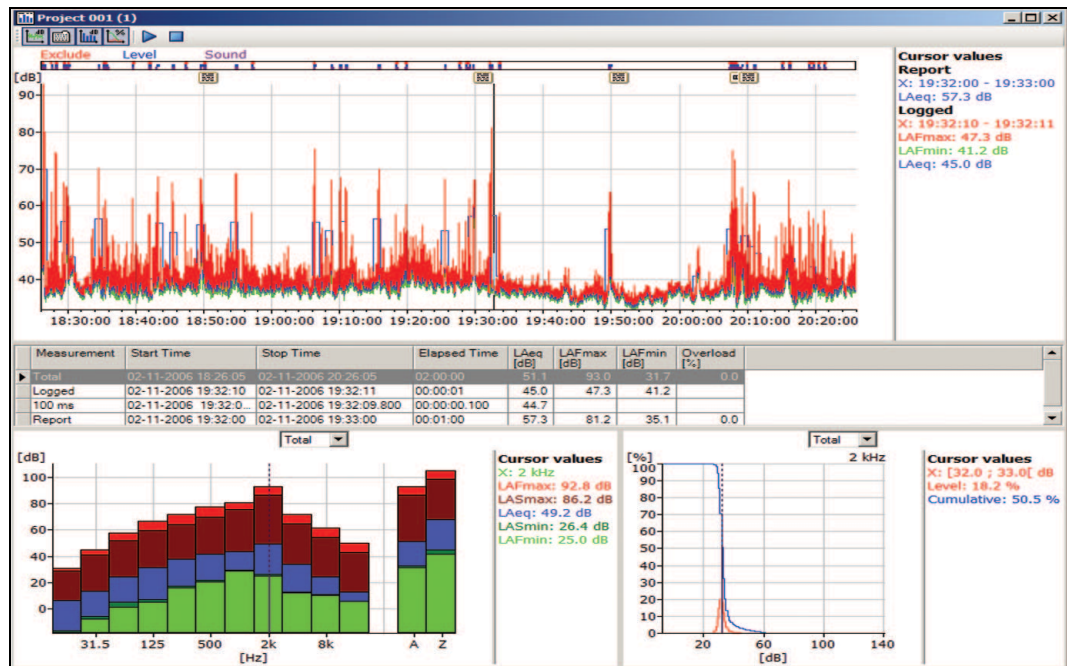
Type 2250 Hand-held Analyzer with Type 4952 Outdoor Microphone system are a Type approved system combination, independently approved to Class 1 accuracy by PTB in Germany (see Type approval certificate: Fig. 7). This ensures that the measurement system complies with the minimum requirements of accuracy for unattended noise measurement, a consideration often overlooked in portable noise monitoring systems. Type approval of the system to IEC 61672-1:2002 also permits the weather-protected measurement system to be laboratory calibrated in accordance with part III of this Sound Level Meter standard.

Post-processing

For data management and post-processing, the following PC-software packages can be used for measuring and reporting:

- BZ-5503 Utility Software for Types 2250 and 2270
- Evaluator Type 7820 – Environmental Noise software

Fig. 8
Example of
post-processing
using BZ-5503



The BZ-5503 Utility program is an all-purpose program that forms the information link to (and from) your Type 2250 and 2270, see Fig. 8. Its primary functions are to manage and archive user data, manage the data transfer from a remote noise monitoring location and handle application software updates, upgrades and licensing. It enables you to perform the following:

- Use the extensive preview functions to listen to recordings and annotations, and view results and photographs including spectra and profiles
- Export data from archives into Type 7815, 7820 or 7825 for post-processing and reporting software applications
- Export data to Microsoft® Excel®, or export in XML or delimited text format
- Control the instrument remotely from a PC via the Internet.

BZ 5503 Utility program is supplied as standard with all Type 2250 L, 2250 and 2270 models

Evaluator Type 7820 has built-in calculation algorithms that allow calculation of compound sound level figures from several contributions. Some may have impulse or tone penalties, depending on which assessment standard chosen, for example ISO 1996, DIN 45645, NFS S 31– 010 or BS 4142 (see [Evaluator Type 7820 Product Data BP 1752](#)).

Noise Monitoring Systems

For noise monitoring tasks, three standard noise monitoring system configurations that include Type 3535-A are available. Each system also includes Outdoor Microphone Type 4952, a microphone extension cable and a tripod for mounting the microphone at the correct position and height.

Portable Noise Monitoring Unit Type 3655-A

This stand-alone unit, based on Hand-held Analyzer Type 2250 Light, monitors broadband sound levels for short- and medium-term monitoring durations. The unit includes space and power for a modem or router for remote viewing of real-time results and to remotely control the unit from a PC. Data can be manually synchronised with a PC using Utility Software for Hand-held Analyzers BZ-5503, which is included, and then be transferred to post-processing software such as Evaluator Type 7820 or exported to Microsoft® Excel®.

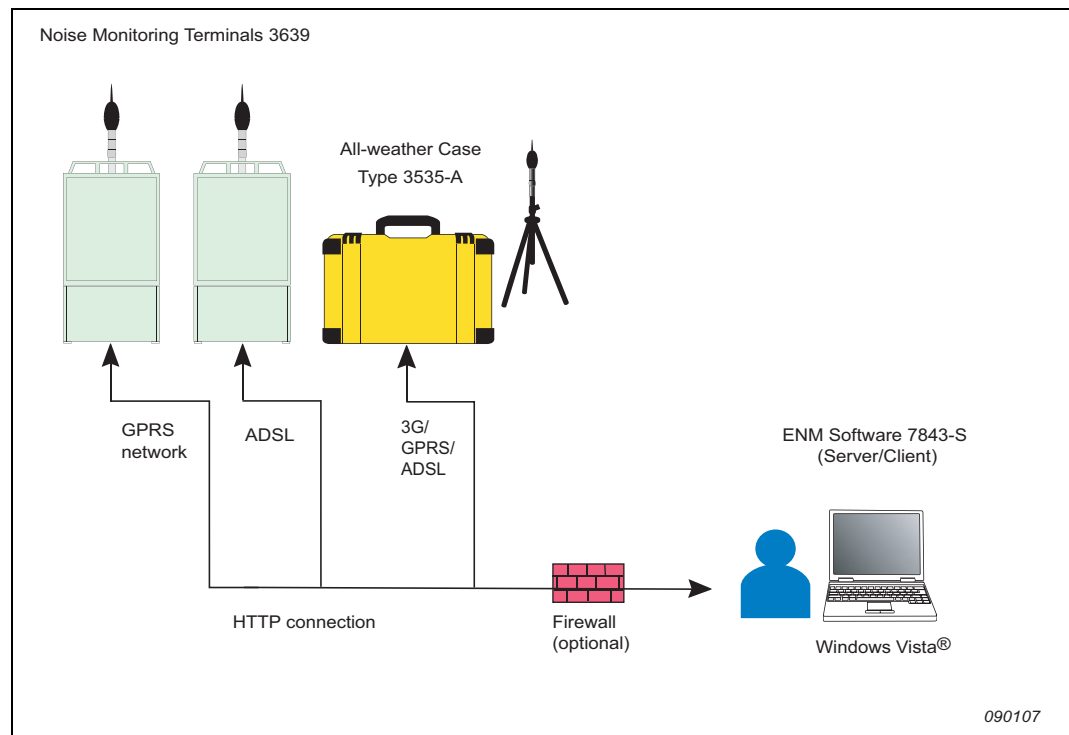
Licenses for Sound Level Meter Software BZ-7130 and Logging Software BZ-7133 are also included. Frequency Analysis Module BZ-7132 can be added as an option if required. The full functionality is described in Type 2250 Light Product Data sheet (BP 2151).

Enhanced Portable Noise Monitoring Unit Type 3655-B

This stand-alone unit, based on Hand-held Analyzer Type 2250 with Enhanced Logging Software BZ-7225, provides enhanced noise monitoring functionality including automatic event detection, sound recording and CIC calibration checks for extended periods of monitoring. The unit includes space for a modem or router for remote viewing of real-time results and to remotely control the unit from a PC. Data can be manually synchronised with a PC using Utility Software for Hand-held Analyzers BZ-5503, which is included, and then be transferred to post-processing software such as Evaluator Type 7820 or exported to Microsoft® Excel®.

Licenses for Frequency Analysis Software BZ-7223, Enhanced Logging Software BZ-7225 and Sound Recording Option BZ-7226 are also included. FFT Analysis Software BZ-7230 and Tone Assessment Option BZ-7231 can be added as options for increased functionality if required. Functionality is described in Type 2250 Product Data sheet (BP 2025).

Fig. 9
Network configuration
with ENM Software
7843-S



Portable Noise Monitoring Terminal Type 3655-C



This is a professional portable noise monitoring terminal for integration in environmental noise monitoring and management systems. Based on Hand-held Analyzer Type 2250 with Noise Monitoring Software BZ-7232, it functions exactly as Noise Monitoring Terminal Type 3639-B in a portable case rather than a mounted cabinet.

The noise monitoring functionality includes CIC calibration checks, optional event detection and sound recording for extended periods of monitoring. The unit includes space for a modem or router for remote viewing of real-time results and to remotely control the unit from a PC using Environmental Noise Management Software Type 7843-S (Server and Client) or Environmental Noise Management Software Light Type 7843-L (Server and Client). Data can be automatically downloaded real-time or on connection with the ENM Server.

Licenses for Sound Level Meter Software BZ-7222 and Noise Monitoring Software BZ-7232 are included. Event Analysis Option for 3639 NMT BZ-7844 can be added as an option for enhanced functionality, if required. Functionality is described in Noise Monitoring Terminal Type 3639-A/B Product Data sheet (BP 2241).

For more information, see [Product Data for the Type 3639-A/B](#) and [Environmental Noise Management Software Type 7843](#) (BP 2100).

Compliance with Standards (para format Compliance)

 	CE-mark indicates compliance with: EMC Directive and Low Voltage Directive. C-Tick mark indicates compliance with the EMC requirements of Australia and New Zealand.
Safety	EN/IEC 61010–1 and ANSI/UL 61010–1: Safety requirements for electrical equipment for measurement, control and laboratory use.
EMC Emission	EN/IEC 61000–6–3: Generic emission standard for residential, commercial and light industrial environments. EN/IEC 61000–6–4: Generic emission standard for industrial environments. CISPR 22: Radio disturbance characteristics of information technology equipment. Class B Limits. FCC Rules, Part 15: Complies with the limits for a Class B digital device.
EMC Immunity	EN/IEC 61000–6–1: Generic standards – Immunity for residential, commercial and light industrial environments. EN/IEC 61000–6–2: Generic standards – Immunity for industrial environments. EN/IEC 61326–1: Electrical equipment for measurement, control and laboratory use – EMC requirements. Note: The above is only guaranteed using accessories listed in this user manual.
Temperature	IEC 60068–2–1 & IEC 60068–2–2: Environmental Testing. Cold and Dry Heat. Operating Temperature: –10 to +50°C (14 to 122°F) – Battery powered. Operating Temperature: –10 to +40°C (14 to 104°F) – Charger powered. Charge Temperature: 0 to +40°C (32 to 104°F) with case lid open. Storage Temperature: –10 to +60°C (14 to 140°F)
Humidity	IEC 60068–2–78: Damp Heat: 90% RH (non-condensing at 40°C (104°F)).
Mechanical	Non-operating: IEC 60068–2–6: Vibration: 0.3 mm, 20 m/s ² , 10–500 Hz IEC 60068–2–27: Shock: 1000 m/s ² , 6 directions IEC 60068–2–29: Bump: 1000 bumps at 250 m/s ²
Enclosure	IEC 60529: Protection provided by enclosures: IP 43

Specifications – All-weather Case Type 3535-A

POWER PANEL ZH-0685

Please refer to the Power Panel schematic diagram in Chapter 3

Mains Input: 100–240 VAC, 0.6 A, 50–60 Hz

Mains Outputs: AC Out 1, AC Out 2, max. 0.3 A.

For Chargers ZG-0857-001

Mains Only Operation: Without batteries the charger(s) will supply the DC Outputs

Mains Only DC Outputs: 16.8 V, max. 0.9 A

DC In: External supply, 12–24 VDC, 1 A.

Cable AQ-0175 supplied

Charger 1, Charger 2: For Chargers ZG-0857-001

Connections:

Part Number	Part	Cable and Connection Description
ZG-0857-001	Chargers	Connection: Ø5.5 mm/2.5 mm (0.22"/0.10") male jack; Cable length: 0.25 m (0.82')
QB-0073	Batteries	Connection: Ø5.5 mm/2.5 mm (0.22"/0.10") female jack; Cable length: 0.15 m (0.49')
AQ-1785	DC In Power Cable	Connection: 4 mm (0.16") banana plugs to Ø6 mm/1.3 mm (0.24"/.5") male jack; Cable length: 2 m (6.6')
AQ-1782	DC Power Cable for Digi Connect WAN router	Connection: Ø5.5 mm/2.1 mm (0.22") female jack to Ø5.5 mm/2.1 mm (0.18"/0.08") female jack; Cable length: 0.6 m (1.97')
AQ-1783	DC Power Cable for Wavecom Fastrack modem	Connection: Ø5.5 mm/2.1 mm (0.18"/0.8") female jack to 4-pin female socket, fused; Cable length: 0.6 m (1.97')
Dependent on country	Mains Power Cable	Length: 2 m (6.6')

TEMPERATURE

Operating Temperature:

- Battery powered: –10 to +50° C (+14 to 122° F)
- Charger powered: –10 to +40° C (+14 to 104° F)

Charge Temperature: 0 to +40° C (+32 to 104° F) with case lid open

Storage Temperature: –10 to +60° C (+14 to 140° F)

BATTERY QB-0073

Weight: 560 g (1.23 lb)

Nominal Voltage: 14.8 V

Rated Capacity: 6.3 Ah minimum, 6.6 Ah typical

Rated Energy: 98 Wh

Type 2250 Operating Time, Backlight Off: 45 hours typical

Expected Life Cycles: >300 cycles at >70% of initial capacity

Charge Retention in Storage:

- 1 year at –20 to +20° C (–4 to +68° F): >80%
- 1 month at –20 to +60° C (–4 to +140° F): >80%

Standards: UL 1642, EU Battery Directive, Manufacturer's

Declaration of Conformity to IEC/IEC 17050–1

Bat. 1, Bat. 2: For Batteries QB-0073

DC Outputs:

- DC Out 1: For Type 2250/2250-L/2270 Ext. Power
- DC Out 2: For Type 2250/2270 Trigger Input
- DC Out 3, DC Out 4, DC Out 5: Power for auxiliary devices. Cables AQ-1782 and AQ-1783 supplied

DC Output Voltage: Whichever is higher of the DC In, Bat.1/Charger 1 and Bat.2/Charger 2

DC Output Switch: Switches all DC Outputs on or off

CHARGERS ZG-0857, ZG-0857-001

Input Voltage: 90–264 VAC

Output Current Max.: 0.9 A

Output Voltage Max.: 16.8 V

Charge Start: <16.4 V

- Step 1: Constant current 0.9 A, Lamp: orange
- Step 2: Constant voltage 16.8 V, Lamp: orange
- Step 3: Charge Termination <100 mA, Lamp: green

Charging Time for QB-0073: 9 hours typical

MECHANICAL

Environmental Protection: IP 43

WEIGHT AND DIMENSIONS

Weight: 6.8 kg (14.99 lb.) including hand-held analyzer

Dimensions: 390 × 530 × 190 mm (15.35 × 20.87 × 7.48")

Max. Dimensions of Modem/Router: 133 × 85 × 25 mm (5.24 × 3.35 × .98")

Ordering Information

Type 3535-A All-weather Case

Including:

- Power Panel ZH-0685
- Mains Cable for Power Panel
- 2 × Battery QB-0073
- 2 × Charger ZG-0857-001
- Cable for DC In AQ-1785
- Power Cable for Digi Connect WAN Router AQ-1782
- Power Cable for Wavecom Fastrack Modem AQ-1783

Packages and Software Modules

Please refer to the Product Data for Type 2250/2250-L/2270

Noise Monitoring Systems

Type 3655-A Portable Noise Monitoring Unit

Including:

- Hand-Held Analyzer Type 2250-L-400 with Logging Software
- All-weather Case Type 3535-A
- Outdoor Microphone Type 4952-A
- Microphone Extension Cable AO-0645-D-030 (3 m/9.8')
- Tripod UA-0801
- Mains Power Supply for Type 2250 ZG-0426

Type 3655-B Enhanced Portable Noise Monitoring Unit

Including:

- Hand-held Analyzer Type 2250-E with Sound Level Meter, Frequency Analysis, Enhanced Logging and Sound Recording Software
- All-weather Case Type 3535-A
- Outdoor Microphone Type 4952-A
- Microphone Extension Cable AO-0645-D-030 (3 m/9.8')
- Tripod UA-0801
- Mains Power Supply for Type 2250 ZG-0426

Type 3655-C Portable Noise Monitoring Terminal

Including:

- Hand-held Analyzer Type 2250-A with Sound Level Meter Software
- Noise Monitoring Software BZ-7232
- All-weather Case Type 3535-A
- Outdoor Microphone Type 4952-A
- Microphone Extension Cable AO-0645-D-030 (3 m/9.8 ft)
- Tripod UA-0801
- Mains Power Supply for Type 2250 ZG-0426
- Ethernet Compact Flash Card UL-1016
- Secure Digital Memory Card UL-1017

Accessories and Components Available Separately

TYPE 3535-A

- | | |
|---------|-------------------------------|
| QB-0073 | Battery |
| ZG-0857 | Charger including mains cable |

ANALYZER

- | | |
|---------|----------------------------------|
| ZG-0444 | Charger for QB-0061 Battery Pack |
|---------|----------------------------------|

FIELD CALIBRATION

- | | |
|-----------|------------------|
| Type 4231 | Sound Calibrator |
|-----------|------------------|

MEASURING

- | | |
|-------------|--|
| UA-0587 | Tripod |
| UA-0801 | Small Tripod |
| UA-0588 | Microphone Holder |
| UA-1317 | Microphone Holder |
| Type 4952 | Outdoor Microphone for 1" thread pole mounting |
| Type 4952 A | Outdoor Microphone including Tripod |
| | Adaptor UA-1707 |
| UA-1707 | Tripod Adaptor for Type 4952 |

- | | |
|---------------|---|
| AO-0645-D-100 | Microphone Extension Cable for Type 4952: 7-pin LEMO to 10-pin LEMO, 10 m (33') |
| UL-1016 | Ethernet Compact Flash Card |
| AO-0441-D-030 | Microphone Extension Cable, 10-pin LEMO, 3 m (10') |
| AO-0441-D-100 | Microphone Extension Cable, 10-pin LEMO, 10 m (33') |
| ZH-0680 | Handswitch |
| UL-1009 | SD Memory Card for Hand-held Analyzers |
| UL-1013 | CF Memory Card for Hand-held Analyzers |

POSTPROCESSING

- | | |
|-----------|---|
| Type 7815 | Noise Explorer - data viewing software |
| Type 7820 | Evaluator - data viewing and calculation software |
| Type 7815 | Protector - software for calculation of personal noise exposure |
| Type 7843 | Environmental Noise Management Software, for use with Noise Monitoring Software BZ-7232 |

Accredited Calibration

- | | |
|---------------|---|
| 2250/2270-CAI | Accredited Initial Calibration of Types 2250/2270 |
| 2250/2270-CAF | Accredited Calibration of Types 2250/2270 |
| 2250/2270-CTF | Traceable Calibration of Types 2250/2270 |

- | | |
|----------|---|
| 3639-TCF | Type 2250 and Type 4952 Coformance Test |
| 3639-CTF | Type 2250 and 4952 Traceable Calibration |
| 3639-CTO | Type 2250 and 4952 Onsite Traceable Calibration |

TRADEMARKS

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